

TABLE OF CONTENTS – Lameness: Recognizing and Treating The Horse's Most Common Ailment

Section I Investigating Lameness

Defining Lameness

Elements of Lameness

Pain

Mechanical Restriction of Movement

Gait Abnormalities Often Confused With Lameness

Identifying the Lam Leg

Abnormal Stance

Using Sound

Observations of Motion

Specific Gait Abnormalities

Shoulder Lameness

Non-Musculoskeletal Causes of Lameness

Pleuritis

Fractured Ribs

Painful Ovaries

Mastitis

Scrotal Problems

Lameness Evaluation

History

Record-Keeping

Physical Examination

Examining the Feet

Palpation and Manipulation

Gait Evaluation

Lameness Grading System

Flexion Tests

Diagnostic Tools & Techniques

Regional (Local) Anesthesia

Radiography (X-Rays)

Ultrasonography (Ultrasound)

Nuclear Scintigraphy (Bone Scan)

Arthrocentesis (Joint Tap)

Bacterial Culture and Antibiotic Sensitivity

Other Tests

Prepurchase Examinations

Preliminary Comments

Veterinarian's Role

Farrier's Role

Before the Examination

The Prepurchase Examination

Examination at Rest

Examination While Led or Longed

Examination While Ridden or Driven

- Additional Tests
 - Radiography
 - Other Imaging Procedures
 - Blood Tests
- The Prepurchase Report

Section II Principles of Therapy

Physical Therapies

- Rest
 - Restriction Phase
 - Regeneration Phase
 - Rehabilitation Phase
 - Light Exercise as Therapy
- Bandaging & Splinting
 - Materials
 - Bandaging Techniques
 - Monitoring and Changing the Bandage
 - Splinting Techniques
- Specific Physical Therapies
 - Heat Therapy
 - Hydrotherapy
 - Massage
 - Passive Motion Exercises
 - Chiropractic Manipulation
 - Acupuncture
 - Homeopathy
 - Therapeutic Ultrasound
 - Laser Therapy
 - Magnetic Field Therapy
 - Electrical Tissue Stimulation

- Routine Foot Care
 - Assessing the Digital Pulses
 - Environment
 - Daily Hoof Care
 - Hoof "First-Aid"
 - Hoof Treatments

- Disease Control
 - Managing Infected Wounds
 - Isolation
 - Hygiene and Disinfection
 - Rabies

Medications

- Anti-inflammatory Therapy
 - The Process of Inflammation
 - Physical Anti-Inflammatory Therapies
 - Anti-Inflammatory Drugs
 - Combination Therapies

- Tetanus Vaccination
 - Tetanus Toxoid and Antitoxin
 - Vaccination Schedule

- Antibiotics
 - Choice of Antibiotic
 - Administration Issues
 - Potentially Harmful Effects
- Joint Medications
 - Cartilage Damage
 - Medical Options
- Veterinary Procedures
 - Joint Lavage
 - Technique
 - Surgery
 - Arthroscopic Surgery
 - Surgical Repair of Fractures
 - Casts
 - Cast Maintenance
 - Cast Removal

Section III Disease Processes & Their Management

- Hoof Conformation & Shoeing Options
 - Normal Foot Structure
 - Hoof Wall
 - Sole, Frog, and Deeper Structures
 - Influence of Conformation
 - Assessing Limb Conformation
 - Altering Limb Conformation
 - Hoof Balance
 - Movement
 - Shoeing for Support
 - Heel Support
 - Wall Support
 - Sole Support
 - Using the Frog for Support
 - Shoeing Options
 - Keg Shoes
 - Bar Shoes
 - Other Modifications
 - Traction Devices
- Joint Problems
 - Joint Structure
 - Cartilage
 - Joint Fluid
 - Supporting Structures
 - Synovitis & DJD
 - Definitions and Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Prevention
 - Septic Arthritis

- Definition
- Causes
- Signs
- Diagnosis
- Treatment
- Prognosis
- Wounds Around Joints
- Luxation (Dislocation)
 - Management
 - Prognosis
- Lyme Disease
- Bone Problems
 - Structure & Function
 - Functions
 - Bone Responses to Stress
 - Normal Responses
 - Abnormal Responses
 - Factors That Influence Bone Quality
- Fractures
 - Definitions
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Complications
 - Rehabilitation After Fracture Repair
 - Prognosis
- Osteomyelitis
 - Definition
 - Superficial Osteomyelitis
 - Osteomyelitis at a Fracture Site
 - Osteomyelitis in Young Foals
- Other Bone Conditions
 - Nutritional Secondary Hyperparathyroidism
 - Rickets
 - Hypertrophic Osteopathy
- Muscle Problems
 - Structure & Function
 - Muscle Responses
 - Muscle Spasms
 - Muscle Atrophy
 - Muscle Hypertrophy
 - Myositis and Myopathy
 - Muscle Injuries
 - Strains and Tears
 - Lacerations
 - Fibrotic Myopathy
 - Compartment Syndrome
 - Metabolic Muscle Problems
 - Exertional Rhabdomyolysis ("Tying up")

- Polysaccharide Storage Myopathy
- Heat-Related Myopathy
- Hypocalcemia
- Miscellaneous Conditions
 - Intramuscular Injection Reactions
 - Bacterial Myositis
 - Strep. equi Myopathy
 - Hyperkalemic Periodic Paralysis (HPP)
 - White Muscle Disease
- Tendon & Ligament Injuries
 - Structure & Function
 - Digital Flexor Tendons
 - Suspensory Ligament
 - Extensor Tendon
 - Tendonitis (Bowed Tendon)
 - Definition
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Prevention
 - Tendon Lacerations & Rupture
 - Flexor Tendons
 - Extensor Tendon Lacerations
 - Tenosynovitis
 - Definition
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Septic Tenosynovitis
 - Definition and Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Check Ligament Injuries
 - Suspensory Ligament Damage
 - Definition
 - Causes
 - Suspensory Branch Desmitis
 - Suspensory Origin Desmitis
- Neurologic Causes of Lameness
 - Structure & Function
 - Neurons
 - Responses to Injury or Disease
 - Assessing the Nervous System
 - History and Physical Examination

- Neurologic Examination
- Diagnostic Tests
- Brain & Spinal Cord Conditions
 - Trauma
 - Cervical Vertebral Malformation ("Wobbler" Syndrome)
 - Equine Protozoal Myeloencephalitis (EPM)
 - Equine Herpesvirus type I Myeloencephalitis
 - Equine Degenerative Myelopathy (EDM)
 - Rabies
 - Other Conditions
- Conditions Involving Nerves
 - Trauma
 - Stringhalt
 - Cauda Equina Neuritis
 - Equine Motor Neuron Disease (EMND)
 - Other Conditions
- Lameness Caused by Skin Problems
 - Wounds
 - Wound Healing
 - Managing Specific Types of Wounds
 - Dermatitis
 - Bacterial Dermatitis ("Scratches")
 - Vesicular Stomatitis
 - Immune-Related Skin Disorders
 - Limb Edema
 - "Stocking Up"
 - Cellulitis
 - Vasculitis
 - Ulcerative Lymphangitis ("Big Leg")
- Developmental Orthopedic Disorders
 - Normal Bone Development
 - Factors Common to Most DODs
 - Growth Rate and Body Size
 - Exercise
 - Diet
 - General Management & Prevention
 - Specific Preventive Measures
- Angular Limb Deformities
 - Definitions
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Prevention
- Flexural Limb Deformities
 - Structure of the Flexor Unit
 - Flexor Laxity
 - Flexor Contracture

- Phyisititis
 - Definition
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis and Prevention
- Osteochondrosis
 - Definition
 - Causes
 - Excessive Load
 - Manifestations
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Prevention
- Osteochondroma

Section IV Treatment of Specific Conditions

- The Foot
 - Navicular Syndrome
 - Definition
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Navicular Bone Fractures
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Laminitis
 - Definition
 - Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
 - Prevention
 - Chronic Laminitis
 - Pedal Osteitis
 - Pedal Bone Fractures
 - Wing Fractures in Foals
 - Extensor Process Fractures
 - Managing Other Pedal Bone Fractures
 - Prognosis
 - Coffin Joint Arthritis (DJD)

- Puncture Wounds
 - First Aid Management
 - Veterinary Treatment
 - Prognosis
- Sole Bruises
 - Typical Sole Bruises
 - Corns
- Foot Abscesses
 - Subsolar Abscesses
 - Hoof Wall Abscesses ("Gravel")
- White Line Disease ("Seedy Toe")
 - Causes
 - Treatment
- Keratoma
- Quarter Cracks
 - Management
- Lacerations & Avulsions
 - Coronary Band Lacerations
 - Hoof Wall Avulsions
- Other Conditions
 - Thrush
 - Canker
 - Sheared Heels
 - Sidebone
 - Quittor
- The Pastern & Fetlock
 - Ringbone
 - Definition
 - Causes
 - Signs and Diagnosis
 - Treatment
 - Prognosis
 - Pastern Fractures
 - Sagittal Fractures
 - Comminuted Fractures
 - Avulsion Fractures
 - Chip Fractures
 - Definition and Causes
 - Signs and Diagnosis
 - Treatment
 - Prognosis
 - Palmar Process Fractures
 - Definition and Cause
 - Signs and Diagnosis
 - Treatment and Prognosis
- Fetlock DJD
 - Osselets
 - Flattening of the Bottom of the Cannon Bone
- Sesamoiditis
 - Definition

- Causes
- Signs
- Diagnosis
- Treatment
- Prognosis
- Prevention
- Sesamoid Fractures
 - Definitions and Causes
 - Signs and Diagnosis
 - Treatment
 - Prognosis
- Distal Sesamoidean Ligament Damage
 - Definition and Causes
 - Signs and Diagnosis
 - Treatment
 - Prognosis
 - Prevention
- Annular Ligament Constriction
 - Definition and Causes
 - Signs
 - Diagnosis
 - Treatment
 - Prognosis
- ``Breakdown" Injuries
 - Conditions Resulting in ``Breakdown"
 - First-Aid Care
 - Suspensory Ligament Degeneration
- The Cannon & Splint Bones
 - Bucked Shins
 - Definition
 - Cause
 - Signs
 - Diagnosis
 - Treatment and Prevention
 - Prognosis
 - Incomplete (``Stress") Fractures
 - Dorsal Stress Fractures
 - Palmar Stress Fractures
 - Vertical (Condylar) Fractures
 - Definition and Causes
 - Signs and Diagnosis
 - Treatment
 - Prognosis
 - Complete Cannon Bone Fractures
 - Management Problems
 - Splints
 - Definitions
 - Causes
 - Signs and Diagnosis
 - Treatment

- Prognosis
- Splint Bone Fractures
 - Definition and Causes
 - Signs and Diagnosis
 - Treatment
 - Prognosis
- The Knee
 - Structure & Function
 - Bones
 - Joints
 - Supporting Structures
 - Joint Mobility
 - Swelling at the Front of the Knee
 - Problems Outside the Joint Capsule
 - Problems Within the Joints
 - Swelling at the Back of the Knee
 - Carpal Canal Syndrome
 - Accessory Carpal Bone Fractures
 - Other Conditions
- The Upper Foreleg
 - Radius
 - Radial Fractures
 - Elbow
 - Fractures
 - Degenerative Joint Disease
 - Capped Elbow
 - Humerus
 - Humeral Fractures
 - Radial Nerve Paralysis
 - Bicipital Bursitis
 - Shoulder
 - Osteochondrosis (Including OCD)
 - Degenerative Joint Disease
 - Shoulder Blade (Scapular) Fractures
 - Sweeney
- The Hock
 - Conditions of the Hock Joints
 - Bog Spavin
 - Osteochondrosis (Including OCD)
 - Bone Spavin
 - Dislocation of the Hock
 - Tarsal Bone Fractures
 - Slab Fractures
 - Maleolus Fractures
 - Calcaneus Fractures
 - Conditions at the Back of the Hock
 - Capped Hock
 - Achilles Tendon Injuries
 - Thoroughpin
 - Curb

- Other Conditions
 - Extensor Tenosynovitis
 - Cunean Bursitis
 - Stringhalt
 - Wounds at the Front of the Hock
- The Upper Hindleg
 - Tibia
 - Tibial Fractures
 - Peroneus Tertius Rupture
 - Fibula
 - Stifle
 - Structure and Function
 - Gonitis
 - Osteochondrosis (Including OCD)
 - Patella Problems
 - Cruciate Ligament Injuries
 - Meniscus Injuries
 - Calcinosis Circumscripta
 - Femur
 - Femoral Fractures
 - Dislocation of the Hip
 - Trochanteric Bursitis
 - Pelvis
 - Pelvic Fractures
 - Miscellaneous Conditions
 - Exertional Rhabdomyolysis (Tying Up)
 - Fibrotic Myopathy
 - Aorto-iliac Thrombosis
- The Back
 - Structure & Function
 - Vertebrae
 - Intervertebral Joints
 - Muscles and Mobility
 - Spinal Nerves and Reflexes
 - Neck & Back Pain
 - Identifying the Problem
 - Treatment Options
 - Specific Conditions
 - Neck Pain
 - Pain Over the Withers
 - Midback Pain
 - Pain Over the Loins and Rump
 - Flip-Over Injuries
 - Injury to the Tail Base
 - Injury to the Rump or Withers
 - Injury to the Poll
 - Whiplash Injury

APPENDIX

- Parts of the Horse
- Skeleton of the Horse
- Directional Terms
- Conversion Tables
- Alternate Anatomic Terms
- List of Abbreviations
- Degrees of Lameness
- Understanding the Prognosis
- Bibliography
- Figure Credits
- Glossary
- INDEX.**